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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/607,611	06/30/2000	Mikael Sylvest	42390P9502	8537

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EXAMINER

VAUGHAN, MICHAEL R

ART UNIT	PAPER NUMBER
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2131

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DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/607,611

Applicant(s)

SYLVEST ET AL.

Examiner

Michael R Vaughan

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☒ Claim(s) 22-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6.9.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Detailed Office Action

Claims 1-21 have been fully reconsidered. Claims 22-24 have been added and fully considered.

Response to Amendment

Claim 5 has been amended to overcome the previous USC §112 rejection.

The newly submitted abstract is accepted.

Drawings

Drawings filed 4-19-04 are accepted.

Response to Arguments

Applicant's arguments filed 4-19-04 have been fully considered but they are not persuasive. Applicant argues on page 19, that Smith does not suggest, disclose, or enable registering an attribute for a plurality of nodes in a network having an unknown

topology. The examiner respectfully disagrees and maintains that Smith anticipates this limitation.

Smith teaches that a network is constantly changing and updating its nodes and members. Furthermore Smith teaches that the active topology is recalculated continually whereby the ports transition to a learning state (col. 2, lines 57-66). Examiner agrees that spanning trees are designed to avoid loops. However, the examiner does not interpret this an indication that the topology of the network is known. Because it is in a constant state of changing and updating the topology is dynamic. Also Smith teaches a way to disseminate VLAN membership information across computer networks running multiple spanning trees (col. 5, lines 51-53). In this case, the topology is ever more complex and vast. Smith does teach a method to exchange membership information to ensure connectivity, however this again is a learning process that starts with an unknown topology. Because the network topology is never constant or fixed, rather dynamic, the examiner's interpretation of the network of Smith is one that is unknown. A known or fixed network would not need to find new routes and paths to other network because it would not be changing dynamically. The examiner would also like the point out that the term unknown has no special meaning in the art of networks. Therefore it is rather ambiguous to describe the nature of a network. When any router is joined to a network it tries to learn the network's topology by listening. Efficient routes are constantly updating tables of information as the network topology changes. For the reasons listed above, Examiner interprets the network of Smith to be unknown because it is constantly updating and dynamically

changing. This fact coupled with unknown having no specific meaning, leads the examiner to the conclusion that Smith anticipates the claimed invention.

Claim Rejections - 35 USC ' 102

Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Smith (USP 6,515,969)

As per claims 1, 16, and 19, Smith teaches registering an attribute to a distributed dictionary for a plurality of nodes in a network having an unknown topology, said attribute comprising a key to index the attribute, a value associated with the key, and an incarnation identifier for the value (column 3, lines 50-55 and Fig 1).

As per claims 2, 17, and 20, Smith teaches:

obtaining the value associated with the key (column 8, lines 39-43);

determining the incarnation identifier for the value (column 10, line 36);

and

combining the key, the value, and the incarnation number into the attribute

(Fig 1).

As per claim 3, Smith teaches multicasting the attribute to the plurality of nodes in the network (column 1, line 64).

As per claim 4, Smith teaches registering a modified attribute to the distributed dictionary, the modified attribute comprising the key, a modified value, and a new incarnation identifier (column 3, line 50—column 4, line 35).

As per claim 5, Smith teaches obtaining the modified value associated the key; determining the new incarnation identifier for the modified value (column 12, lines 1-40);

As per claims 6, 18, and 21, Smith teaches receiving the attribute in a multicast from a reporting node at one of the plurality of nodes (column 9, lines 1-25); and storing the attribute to local memory based at least in part on the key (column 9, lines 30-35).

As per claim 7, Smith teaches the attribute comprises a first attribute, and wherein storing the attribute comprises: identifying a second attribute stored in the local memory having the same key; comparing the incarnation identifier of the first attribute to an incarnation identifier of the second attribute; and

maintaining a newer attribute of the first and second attributes having a most current incarnation identifier (column 12, lines 1-20).

As per claim 8, Smith teaches deregistering an older attribute of the first and second attributes having an older incarnation identifier (column 3, lines 50-61).

As per claim 9, Smith teaches over-writing the older attribute in the local memory with the newer attribute value (column 12, line 35); and storing the older attribute value until the older attribute value expires (column 2, line 58).

As per claim 10, Smith teaches presenting the new attribute to an application of the one of the plurality of nodes (column 12, lines 39-40).

As per claim 11, Smith teaches equivalent sets of registered attributes stored locally at each node of the plurality of nodes (column 9, lines 15-42).

As per claim 12, Smith teaches the network comprises at least one of a local area network (LAN) and a switch stack (column 1, lines 30-45 and column 3, line 35).

As per claim 13, Smith teaches plurality of nodes comprise a plurality of switches comprising a switch stack (column 3, line 35).

As per claim 14, Smith teaches the attribute utilizes a multicast protocol (column 1, line 65).

As per claim 15, Smith teaches the multicast protocol comprises a generic attribute registration protocol (GARP) (column 3, line 52).

Allowable Subject Matter

Claims 22-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

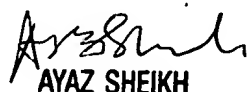
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael R Vaughan whose telephone number is 703-305-0354. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael R Vaughan
Examiner
Art Unit 2131

MV


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